

ABSTRACT OF THE DISCLOSURE

A plurality of substantially S-shaped optical waveguides are embedded in the semiconductor substrate, and at least two optical waveguide returning parts are interposed between the input and output
5 ends of the bent waveguides, and each of the optical waveguide returning parts includes a multiplexing portion. A reflecting part is formed on a rear end side of the multiplexing portion of each optical waveguide returning part. Thus, the length between the input and output ends of the waveguides can be reduced, suppressing a bending loss, achieving to have a
10 high speed and a small size of the integrated device.